

Federal Government, Excluding the Postal Service

SIGNIFICANT POINTS

- The Federal Government is the Nation's largest employer.
- Almost half of Federal workers held managerial or professional jobs, a rate twice as high as the work force as a whole.
- About 4 out of 5 Federal employees work outside the Washington, D.C. metropolitan area.
- Federal employment is projected to decline slightly due to budgetary constraints, the growing use of private contractors, and the transfer of some functions to State and local governments.

Nature of the Industry

The Federal Government affects Americans in countless ways. It defends Americans from foreign aggression, represents American interests abroad, passes and enforces laws, and administers many different programs and agencies. Americans are particularly aware of the Federal Government when they pay their income taxes each year, but they usually do not consider the government's role when they watch a weather forecast, purchase fresh and uncontaminated groceries, travel by highway or air, or make a deposit at their bank. Workers employed by the Federal Government play a vital role in these and many other aspects of American life. (While career opportunities in the U.S. Postal Service and the Armed Forces are not covered here, both are described in the 2000-01 edition of the *Occupational Outlook Handbook*. See the *Handbook* statements on postal clerks and mail carriers and job opportunities in the Armed Forces.)

The Constitution of the United States divides the Federal Government into the legislative, judicial, and executive branches. The legislative branch is responsible for forming and amending the legal structure of the Nation. Its largest component is Congress, the primary U.S. legislative body, which is made up of the Senate and the House of Representatives. This body includes senators, representatives, their staffs, and various support workers. The legislative branch employs only about one percent of Federal workers, nearly all of whom work in the Washington, D.C. area.

The judicial branch is responsible for interpreting the laws the legislative branch enacts. The Supreme Court, the Nation's definitive judicial body, makes the highest rulings. Its decisions usually follow an appeal of a decision made by the one of the regional Courts of Appeal, which hear cases appealed from U. S. District Courts, the Court of Appeals for the Federal Circuit, or State Supreme Courts. U. S. District Courts are located in each State and are the first to hear most cases under Federal jurisdiction. The judicial branch employs about the same number of people as the legislative branch, but its offices and employees are dispersed throughout the country.

Of the three branches, the executive branch has the widest range of responsibilities. Consequently, it employed about 98 percent of all Federal civilian employees (excluding postal workers) in 1998. The executive branch is composed of the Executive Office of the President, 14 executive cabinet departments, and over 90 independent agencies, each of which

has clearly defined duties. The Executive Office of the President is composed of several offices and councils that aid the President in policy decisions. These include the Office of Management and Budget, which oversees the administration of the Federal budget; the National Security Council, which advises the President on matters of national defense; and the Council of Economic Advisers, which makes economic policy recommendations.

Each of the 14 executive cabinet departments administers programs that oversee an element of American life. They are referred to as cabinet departments because the highest departmental official of each, the Secretary, is a member of the President's cabinet. Each, listed by employment size, is described below (table 1).

- **Defense:** Manages the military forces that protect our country and its interests, including the Departments of the Army, Navy, Air Force, and a number of smaller agencies. The civilian workforce employed by the Department of Defense performs various support activities, such as payroll and public relations.
- **Veterans Affairs:** Administers programs to aid U.S. veterans and their families, runs the veterans' hospital system, and operates our national cemeteries.
- **Treasury:** Regulates banks and other financial institutions, administers the public debt, prints currency, and carries out law enforcement in a wide range of areas, including counterfeiting, tax, and customs violations.
- **Agriculture:** Promotes U.S. agriculture domestically and internationally and sets standards governing quality, quantity, and labeling of food sold in the U.S.
- **Justice:** Enforces Federal laws, prosecutes cases in Federal courts, and runs Federal prisons.
- **Interior:** Manages Federal lands including the national parks and forests, runs hydroelectric power systems, and promotes conservation of natural resources.
- **Transportation:** Sets national transportation policy, runs the Coast Guard except in time of war, plans and funds the construction of highways and mass transit systems, and regulates railroad, aviation, and maritime operations.
- **Health and Human Services:** Sponsors medical research, approves use of new drugs and medical devices, runs the Public Health Service, and administers the Social Security and Medicaid programs.

- *Commerce*: Forecasts the weather, charts the oceans, regulates patents and trademarks, conducts the census, compiles statistics, and promotes U.S. economic growth by encouraging international trade.
- *State*: Oversees the Nation's embassies and consulates, issues passports, monitors U.S. interests abroad, and represents the U.S. before international organizations.
- *Energy*: Coordinates the national use and provision of energy, oversees the production and disposal of nuclear weapons, and plans for future energy needs.
- *Labor*: Enforces laws guaranteeing fair pay, workplace safety, and equal job opportunity; administers unemployment insurance; regulates pension funds; and collects economic data in the Bureau of Labor Statistics.
- *Housing and Urban Development*: Funds public housing projects, enforces equal housing laws, and insures and finances mortgages.
- *Education*: Provides scholarships, student loans, and aid to schools.

Table 1. Federal Government executive branch civilian employment, March 1999

(In thousands)

	United States	Washington, DC area
Total	2,737	322
Executive departments		
Defense, total	832	86
Army	260	25
Navy	255	35
Air Force	182	6
Other	135	20
Veterans Affairs	262	8
Treasury	160	22
Health and Human Services	129	30
Agriculture	109	13
Justice	96	21
Interior	78	10
Transportation	67	10
Commerce	37	20
State	9	7
Energy	20	7
Labor	17	6
Housing and Urban Development	13	3
Education	5	3
Independent agencies		
National Aeronautic and Space Administration	24	6
Federal Deposit Insurance Corporation	20	4
General Services Administration	20	7
Tennessee Valley Authority	19	0
Environmental Protection Agency	18	6

Source: U.S. Office of Personnel Management

Numerous independent agencies perform tasks that fall between the jurisdictions of the executive departments or that are more efficiently executed by an autonomous agency. Some smaller, but well known independent agencies include the Peace Corps, the Securities and Exchange Commission, and the Federal Communications Commission. Although the majority of these agencies are fairly small, employing fewer than 1,000 workers (many employ fewer than 100 workers), some are quite large. The largest independent agencies are:

- *National Aeronautics and Space Administration*: Oversees aviation research and conducts exploration and research beyond the Earth's atmosphere.
- *Environmental Protection Agency*: Runs programs to control and reduce pollution of the Nation's water, air, and lands.
- *General Services Administration*: Manages and protects Federal Government property and records.
- *Tennessee Valley Authority*: Operates the hydroelectric power system in the Tennessee river valley.

Working Conditions

Due to the wide range of Federal jobs, most of the working conditions found in the private sector are also found in the Federal Government. Most white-collar employees work in office buildings, hospitals, or laboratories, and most of the blue-collar workforce can be found in warehouses, shipyards, military bases, construction sites, national parks, and national forests. Work environments vary from comfortable and relaxed to hazardous and stressful, such as those experienced by law enforcement officers, astronauts, and air traffic controllers.

The vast majority of Federal employees work full time, often on flexible or "flexitime" schedules, which allow workers more control over their work schedules. Some agencies also have "flexiplace" programs, which allow selected workers to perform some job duties at home or from regional centers.

Some Federal workers spend much of their time away from the offices in which they are based. Inspectors and compliance officers, for example, often visit businesses and work sites to ensure laws and regulations are obeyed. Some Federal workers frequently travel long distances, spending days or weeks away from home. Auditors, for example, may spend weeks at a time in distant locations.

Employment

In 1998, the Federal Government employed about 1.8 million civilian workers, or about 2 percent of the Nation's workforce. Although the Federal Government employs workers in every major occupational group, workers are not employed in the same proportions in which they are employed throughout the economy as a whole (table 2). The analytical and technical nature of many government duties translates into a much higher proportion of professionals and technicians in the Federal Government, compared with most industries. Conversely, the Government sells very little, so it employs relatively few sales workers.

Even though most Federal departments and agencies are based in the Washington, DC area, only about 16 percent of all Federal employees worked in the vicinity of the Nation's Capital in 1998. In addition to Federal employees working throughout the United States, about 3 percent are assigned overseas, mostly in embassies or defense installations.

Occupations in the Industry

Although the Federal Government employed workers in almost every occupation in 1998, about 71 percent of Federal workers were employed in professional specialty, administrative support, and executive, administrative, and managerial occupations (table 3). Professional specialty

occupations comprise about 31 percent of Federal employment. The largest group of these workers are engineers, such as *chemical, civil, aeronautical, industrial, electrical, mechanical, and nuclear engineers*. These professionals are found in every department of the executive branch, but they most commonly work in the Department of Defense, the National Aeronautic and Space Administration, and the Department of Transportation. In general, they solve problems and provide advice on technical programs, such as building highway bridges or implementing agency-wide computer systems.

Table 2. Percent distribution of employment in the Federal Government and the total for all industries by major occupational group, 1998

Occupational group	Federal Government	All industries
Total	100.0	100.0
Professional specialty	30.8	13.9
Administrative support, including clerical	22.5	18.7
Executive, administrative, and managerial	17.6	9.9
Precision production, craft, and repair	9.2	10.7
Technicians and related support	8.3	3.8
Service	6.8	16.5
Operators, fabricators, and laborers	3.2	14.0
Marketing and sales	0.7	10.4
Agriculture, forestry, fishing, and related	0.7	2.1

Other professional specialty workers include *computer engineers, computer scientists, and systems analysts*, who are employed throughout government. They write computer programs, analyze problems related to data processing, and keep computer systems running smoothly. Also in this group are health professionals, such as *registered nurses and physicians*, most of whom are employed by the Department of Veterans Affairs (VA) in one of the many VA hospitals. Other professionals included *life scientists*, such as *biologists, foresters and conservation scientists*, who research problems dealing with life processes, and *physical scientists*, such as *geologists, meteorologists, and physicists*, who examine the state of the earth and research physical phenomena. The Department of Agriculture employs the vast majority of life scientists, but physical scientists are distributed throughout government.

Executive, administrative, and managerial workers, who comprise about 18 percent of Federal employment, are primarily responsible for overseeing operations. *Legislators*, for example, are responsible for passing and amending laws. Managerial workers include a broad range of officials who, at the highest levels, may head Federal agencies or programs, such as *general managers and top executives. Middle managers*, on the other hand, usually oversee one activity or aspect of a program.

Other executive, administrative, and managerial workers provide management support. *Accountants and auditors* prepare and analyze financial reports, review and record revenues and expenditures, and investigate operations for fraud and inefficiency. *Inspectors and compliance officers* enforce Federal regulations governing everything from aircraft to food. *Tax examiners* determine and collect taxes. Management support workers also include *purchasing agents*, who

handle Federal purchases of supplies, and *management analysts*, who study government operations and systems and suggest improvements.

Over 1 Federal worker in 5 is in administrative support. These employees aid management staff with administrative duties. Administrative support workers in the Federal Government include *secretaries, bookkeepers, receptionists, switchboard operators, and accounting, auditing, stock, traffic, shipping, and receiving clerks*.

Technicians make up about 8 percent of the Federal workforce. They may aid professionals in research, analysis, or law enforcement. Often their tasks and skills are quite specialized, as with *air traffic controllers*. Also, *engineering technicians*, who may work either directly with engineers or by themselves, are commonly found in Federal employment. Other technician occupations include *health technicians*, such as *dental hygienists and radiologists*, who have specialized health service jobs, and *legal assistants*, who aid judges and attorneys.

Compared to the economy as a whole, service workers are relatively scarce in the Federal Government. Nearly half of all Federal workers in these occupations are *firefighters, law enforcement agents and officers, and correctional officers*. These workers protect the public from crime, oversee Federal prisons, and stand ready to intervene in emergencies.

Over half of the Federally employed precision production, craft, and repair occupations were mechanics, such as *vehicle and mobile equipment mechanics*, who fix and maintain all types of motor vehicles, aircraft, and heavy equipment, and *electrical and electronic equipment operators*. Other precision production workers are skilled in construction trades, such as *painters, plumbers, and electricians*.

The Federal Government employs few workers in *fabricator, operator, and laborer occupations; agriculture, forestry, fishing, and related occupations; or marketing and sales occupations*.

Training and Advancement

Training and educational requirements in the Federal Government mirror those in the private sector for most major occupational groups. Almost all professional specialty jobs, for example, require a 4-year college degree. Some, such as *engineers, physicians and life and physical scientists*, require a bachelor's or higher degree in a specific field of study. Also, because managers are usually promoted from professional occupations, most have at least a bachelor's degree. Administrative support workers in the government usually only need a high school diploma, though any further training or experience, such as a junior college degree, or at least 2 years of relevant work experience, is an asset. As in the private sector, most technicians are required to have some vocational training or extensive work experience; many have 2-year associate degrees. Most Federal jobs in other occupations require no more than a high school degree, although most departments and agencies prefer workers with vocational training or previous experience.

In general, each Federal department or agency determines its own training requirements and offers workers opportunities to improve job skills or become qualified to advance to other jobs. These may include technical or skills training, tuition assistance or reimbursement, fellowship programs, and executive leadership and management training programs, seminars, and workshops. This training may be offered on the job, by another agency, or at local colleges and universities.

Table 3. Employment in the Federal Government, excluding the Postal Service, by occupation, 1998 and projected change, 1998-2008

(In thousands)

Occupation	1998		1998-2008 Percent change
	Employment Number	Percent	
All occupations	1,819	100.0	-9.0
Professional specialty	561	30.8	-0.4
Engineers	90	5.0	-12.2
Systems analysts	54	3.0	31.8
Registered nurses	46	2.5	-1.8
Physicians	45	2.5	-3.4
Life scientists	38	2.1	5.8
Teachers, librarians, and counselors	32	1.8	12.2
Physical scientists	31	1.7	-4.1
Judges, magistrates, and other judicial workers	31	1.7	0.9
Lawyers	26	1.4	24.3
Social scientists	25	1.4	-7.5
Administrative support, including clerical	410	22.5	-16.2
Other clerical and administrative support workers	180	9.9	-4.4
Secretaries	63	3.5	-25.0
Office clerks, general	54	3.0	-7.6
Bookkeeping, accounting, and auditing clerks	36	2.0	-9.8
Office and administrative support supervisors and managers	30	1.7	-6.0
Stock clerks and order fillers	25	1.4	-29.7
Welfare eligibility workers and interviewers	23	1.3	-26.3
Computer operators	21	1.2	-42.9
Executive, administrative, and managerial	321	17.7	-5.3
Inspectors and compliance officers, except construction	53	2.9	3.8
Accountants and auditors	51	2.8	-26.6
Management analysts	37	2.1	13.8
Buyers and purchasing agents	33	1.8	-3.4
Managerial and administrative occupations	28	1.5	-7.9
Tax examiners, collectors, and revenue agents	27	1.5	-0.2
Human resources, training, and labor relations specialists	25	1.3	4.5
Precision production, craft, and repair	168	9.2	-17.2
Mechanics, installers, and repairers	89	4.9	-13.4
Construction trades	32	1.8	-16.8
Blue-collar worker supervisors	25	1.4	-29.7
Technicians and related support	151	8.3	-13.0
Health technicians and technologists	41	2.3	-11.5
Engineering technicians	39	2.1	-20.9
Air traffic controllers and airplane dispatchers	25	1.4	-3.4
Service	125	6.8	7.1
Police and detectives	42	2.3	9.7
Health service occupations	22	1.2	-12.1
Operators, fabricators, and laborers ...	58	3.2	2.3
Helpers, laborers, and material movers, hand	26	1.4	-50.2
Transportation and material moving machine and vehicle operators	18	1.0	-25.0
All other occupations	26	1.4	-12.3

Advancement in the Federal Government is commonly based on a system of occupational pay levels, or “grades.” Workers enter the Federal civil service at the starting grade for an occupation and begin a “career ladder” of promotions until they reach the full-performance grade for that occupation. This system provides for a limited number of non-competitive promotions which usually are awarded at regular intervals, assuming job performance is satisfactory. Although these promotions do not occur more than once a year, they sometimes are awarded in the form of 2-grade increases. The exact pay grades associated with a job’s career track depend upon the occupation. For example, the pay grades in the career track for an attorney are significantly higher than those associated with a secretary.

Once workers reach the full-performance level of the career track, they must compete for subsequent promotions, and advancement becomes more difficult. At this point, promotions occur as vacancies arise, and they are based solely on merit.

The top managers in the Federal civil service belong to the Senior Executive Service (SES), the highest positions Federal workers can reach without being specifically nominated by the President and confirmed by the U.S. Senate. Only a relative few workers attain SES positions, and competition is intense. Because it is the headquarters for most Federal agencies, opportunities to advance to upper level managerial and supervisory jobs are best in the Washington, D.C. metropolitan area.

Table 4. Federal Government General Schedule pay rates, 1999

GS level	Entrance level	Step increase	Maximum level
1	\$ 13,362	\$ varies	\$ 16,718
2	15,023	varies	18,907
3	16,392	546	21,306
4	18,401	613	23,918
5	20,588	686	26,762
6	22,948	765	29,833
7	25,501	850	33,151
8	28,242	941	36,711
9	31,195	1,040	40,555
10	34,353	1,145	44,658
11	37,744	1,258	49,066
12	45,236	1,508	58,808
13	53,793	1,793	69,930
14	63,567	2,119	82,638
15	74,773	2,492	97,201

SOURCE: U.S. Office of Personnel Management

Earnings

There are several pay systems governing the salary rates of Federal civilian employees. In 1999, the majority of Federal workers were paid under the General Schedule (GS). The General Schedule, shown in table 4, has 15 grades of pay for civilian white-collar and service workers, and smaller within-grade step increases that occur based on length of service and quality of performance. Workers in localities with high costs of living are paid as much as an additional 12 percent, and some hard-to-fill occupations are paid more as an incentive. In general, this schedule is amended every January to reflect changes in the cost of living.

In 1999, the average worker paid under the General Schedule earned \$46,600; the average full-time, professional worker

earned \$61,600. Patent administrators had the highest average earnings of \$99,000 (table 5), while some administrative support workers started at salaries less than \$14,000.

Table 5. Average annual salaries in the Federal Government in selected occupations, 1999

Occupation	Salary
All occupations	\$46,580
Patent administrator	98,900
Astronomer	81,310
Attorney	77,740
Financial manager	73,350
Economist	67,790
Computer scientist	66,510
Chemist	64,230
Electrical engineer	63,590
Statistician	62,840
Microbiologist	62,570
Architect	62,180
Podiatrist	61,960
Personnel manager	59,060
Accountant	58,190
Chaplain	57,330
Ecologist	57,130
Librarian	56,370
Intelligence agent	54,210
Physical therapist	51,370
Forester	51,010
Social worker	50,230
Botanist	48,770
Nurse	46,950
Engineering technician	46,230
Law clerk	41,810
Border patrol agent	40,200
Computer operator	34,220
Secretary	30,230
Police officer	29,990
Medical technician	27,820
Nursing assistant	24,990
Mail and file clerk	23,740
Telephone operator	23,560

SOURCE: U.S. Office of Personnel Management

The Federal Government hires employees in an occupational specialty with a career ladder. Typically, workers without a high school diploma who are hired as clerks start at GS-1, and high school graduates with no additional training hired at the same job start at GS-2 or 3. Entrants with some technical training or experience who are hired as technicians may start at GS-4. Those with a bachelor's degree are generally hired in professional occupations, such as economist, with a career ladder that starts at GS-5 or 7, depending on academic achievement. Entrants with a master's degree or Ph.D. may start at GS-9. Individuals with professional degrees may be hired at the GS-11 or 12 level.

New employees almost always start at the first step of a grade; however, if the position in question is difficult to fill, entrants may receive somewhat higher pay or special rates. Almost all physician and engineer positions, for example, fall into this category.

Non-supervisory Federal workers usually receive periodic step increases within their grade if they are performing their job satisfactorily. In addition to these within-grade longevity increases, Federal workers are awarded bonuses for excellent job performance.

Workers who advance to managerial or supervisory positions are paid under the General Schedule pay system and may receive within-grade longevity increases, bonuses, and promotions to higher GS levels. Managers at the highest levels belong to the Senior Executive Service, or SES, and their bonus provisions are even more performance-based.

The Wage Board schedule is used to pay most Federal workers in craft, repair, operative, and laborer jobs. This schedule sets Federal wages so they are comparable to prevailing regional wage rates for similar types of jobs. As a result, wage rates paid under the Wage Board schedule can vary significantly from one locality to another.

In addition to base pay and bonuses, Federal employees may receive incentive awards. These one-time awards, ranging from \$25 to \$25,000, are bestowed for a significant suggestion, a special act or service, or sustained high job performance. Some workers also may receive "premium" pay, which is granted when the employee must work overtime, on holidays, at night, or under hazardous conditions.

Benefits are an important part of Federal employee compensation. Federal employees may choose from a number of health plans and life insurance options; premium payments for these policies are partially offset by the government. In addition, workers hired after January 1, 1984 participate in the Federal Employee Retirement System (FERS), a three-tiered retirement plan including Social Security, a pension plan, and an optional Thrift Savings Plan. Worker participation in the Thrift Savings Plan is voluntary, but any contributions made are tax-deferred, and, up to a point, matched by the Federal Government. In addition to other benefits, some Federal agencies provide public transit subsidies in an effort to encourage employee use of public transportation.

Federal employees receive both vacation and sick leave. They earn 13 days of vacation leave a year for the first 3 years, 20 days a year for the next 12 years, and 26 days a year after their fifteenth year of service. Workers also receive 13 days of sick leave a year, which may be accumulated indefinitely. About 60 percent of all Federal civilian employees are represented by unions through their bargaining units, although a smaller percentage of these employees actually belong to a union.

Outlook

Employment in the Federal Government is projected to decline by 9 percent through the year 2008, while the economy as a whole is expected to grow 15 percent over the 1998-2008 period, in comparison. The projected reduction in Federal jobs reflects governmental cost-cutting, the growing use of private contractors, and continuing devolution—the practice of turning over the development, implementation, and management of some programs of the Federal government to State and local governments. As a result, keen competition is expected for many Federal positions, especially during times of economic uncertainty when workers seek the stability of Federal employment. In general, Federal employment is considered to be relatively stable because it is not affected by cyclical fluctuations in the economy, as are employment levels in many construction, manufacturing, and other private sector industries.

Because of its public nature, the factors that influence Federal Government staffing levels are unique. The Congress and

President determine the Government's payroll budget prior to each fiscal year, which runs from October 1 through September 30 of the following year. Each Presidential administration and Congress have different public policy priorities, resulting in increasing levels of Federal employment in some programs and declines in others. The effect of these priorities in recent years has been a decline in Department of Defense civilian employment, which equals about 40 percent of Federal civilian employment. Although this decline is expected to level off over the next decade, the emphasis on reduced government payrolls will lead to decreases in employment in many other agencies.

Much of this decline will be carried out through attrition—simply not replacing workers who retire or leave the Federal Government for other reasons. Layoffs, called “reductions in force”, have occurred in the past, but they are uncommon and usually affect relatively few workers. In spite of attrition and declining employment, there still will be numerous employment opportunities in many agencies due to the need to replace workers who leave the workforce, retire, or accept employment elsewhere. Furthermore, some occupations, especially professional, technical, and managerial occupations, will be in demand even as employment in other occupations is being reduced.

The distribution of Federal employment will continue to shift toward a higher proportion of professional, technical, and managerial workers, as employment declines will be most rapid in blue-collar and clerical occupations. Employment among blue-collar workers is expected to decline as many of their functions are contracted out to private companies. In addition to the outsourcing of their duties, employment of administrative support and clerical workers in the Federal Government also will be adversely affected by the growing use of office automation.

Sources of Additional Information

Information on acquiring a job with the Federal Government may be obtained from the Office of Personnel Management through a telephone-based system. Consult your telephone directory under U.S. Government for a local number or call (912) 757-3000; TDD (912) 744-2299. That number is not tollfree and charges may result. Information is also available from their Internet site: **<http://www.usajobs.opm.gov>**

The duties of Federal Government workers in various occupations are similar to those of their private sector counterparts. Further information on the specific occupations discussed in this statement can be found in the 2000-01 edition of the *Occupational Outlook Handbook*.